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ABSTRACT

This study examined the attitudes of 194 teachers in 17 regular primary schools in the city of Zagreb (Croatia) and the surrounding area about the integration of children with intellectual or other developmental disabilities. In addition to providing demographic data, the teachers completed a 21-item questionnaire with questions that addressed: (1) their attitudes toward pupils with developmental difficulties; (2) attitudes toward integration of these pupils; (3) familiarity with the characteristics and needs of pupils with developmental difficulties; and (4) teacher readiness to get involved in improving the integration process. Factor analysis identified five factors, all of which indicated predominantly negative attitudes by teachers toward integration. The factors examined were: (1) recognition of advantages of integration for pupils with developmental difficulties; (2) attitude toward regular schools' equipment; (3) effects of integration on other pupils; (4) familiarity with characteristics and needs of special needs students; and (5) attitudes toward partial integration. The most positive attitudes were expressed by female teachers, under age 36, and with less than 5 years of experience. The most negative attitudes were expressed by male teachers, over age 36, with work experience of more than 15 years and the subject teachers. (Contains 23 references.) (DB)



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TEACHERS' ATTITUDES TOWARD THE INTEGRATION OF PUPILS WITH INTELLECTUAL DISABILITIES

1. Introduction

Educational integration was legalised in the Republic of Croatia in 1980, by the Law of up-bringing and primary education, which brought a possibility of full and partial integration to children with development difficulties. Croatia has slightly less then 5 mil. inhabitants, with 428 thousand primary school attendants. The results of the State Statistical Institute show that only 4416 pupils with development difficulties are integrated in regular school system (little over 1%), the majority of which form children with intellectual disability. However, the professionals familiar with the educational situation in Croatia disagree with these figures, stating that a considerably higher number of pupils in regular education require additional help, but are not registered.

Although over 15 years passed since the legal regulation, a number of subjective, objective and organisational demands have not been met. Late political situation has also put great strain on the integrational work and the process of integration in Croatia is still not satisfactory.

A great role in integration is attributed to teachers, as the successful realisation of this process greatly depends on their readiness to accept children with development difficulties and to find most adequate methods of up-bringing and education (Mavrin-Cavor, Levandovski, 1991; Mustać, Vicić, 1996; Levin, 1992; Villa, Thousand, 1992; Thousand, Villa, Nevin, 1994; Lewis, Doorlag, 1987).

The success of pupils with development difficulties in integration conditions thus depends on professional competence of teachers, but also on their opinions toward children with development difficulties and especially towards their integration. Muth, for example, when stating the conditions for integration, in 1977, stresses the request that "special pedagogy" topics be included in teachers' curriculum. Muth feels that the purpose of integration cannot be achieved if the teachers are not familiar with the problems of children with development difficulties, their specific needs and education potential, nature of disability and didactical possibilities for the integrated education of pupils with and without difficulties.

Unfortunately, a number of authors still stress that the competence of teachers' for work with pupils with development difficulties is inadequate and insufficient (Tomas, 1992; Atkin, Bastiani, 1985; Stierer, 1985; Strain, Kerrs, 1981; Sekulić-Majurec, 1983). Lyon, Vaassen and Toomey (1989) even state that as much as 80% of teachers



feel that their education has not sufficiently prepared them for work with pupils with development difficulties.

Accepting attitudes as the behaviour determinants, a number of authors in the world and in Croatia have applied themselves to the analysis of teachers' attitudes towards the integration of pupils with development difficulties in regular schools and the level of influence these attitudes have on the integrated situation (Cartledge, Frew, Zaharias, 1985; Garrett, Crump, 1980; Simpson, Sekulić-Majurec, 1983). A great part of the research results show unfavourable attitudes of teachers (Shotel, Iano, McGettingan, 1972; Harasimiw, Home, 1986; Stančić, Mejovšek, 1982; Štević-Vuković, 1986). The researchers interpret these results through negative attitudes in the general population or through the teachers' being insufficiently informed. Other authors feel that a number of factors influence attitudes of teachers, such as characteristics and physical appearance of the child (Rose, Salvia, 1975; after Fulgosi-Masnjak, 1989), teacher's characteristics (Shotel, Iano, McGettingan, 1972), awareness of the child's IQ (Beez, 1971; Pelliguini, Hicks, 1972; after McEvoy, Nordquist, Cunningham, 1984), extent to which the child is accepted by its peers (Corman, Gottlieb, 1978; after Fulgosi-Masnjak, 1989), etc.

The results of the research projects in attitudes of regular school teachers toward children with development difficulties and their educational integration in Croatia, carried out before the process of integration has been launched, show that a considerable percentage of teachers does not have a positive attitude toward integration (Stančić, Mejovšek, 1982; Sekulić-Majurec, 1983; Stančić, Z., 1989). There are, however, differences in teachers' attitudes toward different types of development difficulties (Štević-Vuković, 1986) and the attitudes are most positive toward children with intellectual disability. Levandovski points out that teachers in regular schools tend to have unrealistic estimates of their pupils' educational potential, which can perhaps explain these attitudes and show the need for adequate teachers' training.

Stressing the importance of teachers' attitudes Harling, Stein and Cruichshang (after McEvoy, Nordquist, Cunningham, 1984) have even back in 1957 pointed out that the attitudes of teacher toward children with development difficulties not only influence the efficiency of the process of integration, but also intellectual, social and emotional development of children. So it seems necessary that, in creating the conditions for integration, the teachers' attitudes should be modified toward better acceptance of children with development difficulties. This still does not mean that the integration should wait until the attitudes of every teachers becomes optimal, as "the integration itself changes teachers' attitudes" (Muth, 1977).

2. Object

The object of this work is to state the attitudes of teachers in regular schools in Croatia toward the children with development difficulties and their integration in regular education.

It must be stressed that this is the first work of this kind after 15 years of teachers' experience of the integration of these pupils.



3. Methods

3.1. Sample

The sample consists of 194 teachers from 17 regular primary schools in the city of Zagreb and in the surrounding area. The teachers selected have each one ore more pupils with development difficulties. Teachers are of both sexes, aged from 23-64 and have worked in regular primary school form 1-30 years. There are both class and subject teachers, with either higher or university education.

3.2. Measuring instruments, variables and organisation of testing

The general data about participant teachers have been collected - sex, age, education level, work experience and position. Apart from that, the teachers were given questionnaire "Attitudes toward integration", composed for this project and the instruction was given by a trained examiner. The questionnaire inventory consists of 21 statements, each with 5 acceptance levels, determinated by the answers: I agree completely, I mostly agree, I cannot decide, I mostly disagree, I completely disagree.

The statements can be grouped in 4 hypothetical groups:

- 1. Attitudes toward pupils with development difficulties variables 7, 10 and 12
- 2. Attitudes toward integration of pupils with development difficulties variables 1, 2, 3, 4, 5, 9, 11, 12 and 13
- 3. Familiarity with the characteristics and needs of pupils with development difficulties variables 8, 18, 19, 20 and 21
- 4. Teacher's readiness for personal engagement on the task of improvement of the integration process variables 6, 14, 15, 16 and 17

The statements are the following

- 1. The regular school can supply to pupils with development difficulties every benefit provided by the special education schools.
- 2. It would be best if all of the pupils with development difficulties attended special education schools.
- 3. The pupils with development difficulties have a negative influence on the normal work in class.
- 4. The pupils with development difficulties can have a bad influence on the progress of the entire class.
- 5. The integration of pupils with development difficulties in regular classes of the regular primary school is beneficial to their progress.
- 6. The pupils in regular education can be prepared to accept pupils with development difficulties reasonably and friendly.
- 7. In a lot of ways, pupils with development difficulties are equal to pupils without development difficulties.
- 8. Some pupils with development difficulties can succeed in school better than a lot of pupils without development difficulties.



- 9. Socialising with other pupils in regular primary school is more beneficent to pupils with development difficulties than socialising with pupils with development difficulties in special education school.
- 10. Pupils without development difficulties can have pupils with development difficulties for friends.
- 11.In regular primary school pupils with development difficulties will be molested by their peers without development difficulties.
- 12. Teachers have to be more benevolent toward pupils with development difficulties.
- 13. Pupils with development difficulties can learn more in regular primary school than in special education.
- 14.Regular primary school can be completely prepared for accepting pupils with development difficulties.
- 15.I find that I can work with pupils with development difficulties in my class.
- 16.To work with pupils with development difficulties, one would have to have additional education in special pedagogy.
- 17.Regular primary schools need special education professionals, trained for work with pupils with development difficulties.
- 18. The majority of pupils with development difficulties can, with help of special education professionals, complete successfully regular curriculum, in regular classes of regular school.
- 19. The majority of pupils with development difficulties can complete successfully adapted curriculum, in regular classes of regular school.
- 20. The majority of pupils with development difficulties can complete successfully part of regular curriculum in regular classes of regular school, and the other part in special classes.
- 21. The majority of pupils with development difficulties can complete curriculum successfully in **special classes** of regular school.

These statements, with general data on teachers, form the variables in this work.

3.3. Data processing methods

Factor and discriminant analysis were used in data processing.

4. Results and discussion

4.1. Factor analysis on the questionnaire "Attitudes toward integration" (ATI)

Factor analysis of collected answers shows the following results:

For the factor extraction in the space of monitored variables Guttman-Kaiser criterion was used, and the 21 variable space was reduced to the total of 5 components (shown in Table 1.) explaining 58% of the total variance of the system.

Table 1.

Eigenvalues and the cumulative variant of the ATI system



variable	eigenvalue	cumulative variance	% of total variance
1	6.66245	6.66245	31.72595
2	1.65923	8.32167	39.62702
3	1.50821	9.82989	46.80898
4	1.21137	11.04125	52.57741
5	1.10906	12.15032	57.85865

The significant components have been transformed in varimax position and a orthoblique method transformation has been made. Correlation of variables and of each of the 5 factors are shown in Table 2.

Table 2
Correlation of variables and ATI factors

factor / variable	1	2	3	4	5
1	.6468	.6639	4152	.5013	.1873
2	.6277	.3176	6924	.5879	.1494
3	.4505	.1981	8379	.3921	.0386
4	.2553	.0713	8118	.3933	.0539
5	.6945	.3340	4773	.6285	.0047
6	.5337	.1224	5103	.6981	1579
7	.5949	.2744	3903	.7360	.0218
8	4828	5510	.3350	6078	1403
9	.7336	.1966	4688	.5360	.0307
10	.3724	.1547	4731	.6522	0702
11	.4894	.3767	5302	.4301	1443
12	.2601	.3874	3269	.6601	.0237
13	.7665	.3950	4485	.5053	.1066
14	.7594	.3259	4682	.3954	0381
15	.6565	.1953	4671	.1093	2742
16	.0212	5828	1930	0097	.0097
17	.0008	5820	.0148	.2325	.0340
18	.3052	.5791	3345	.3102	.0975
19	. 7327	.2067	2691	.3641	1885
20	.1897	0089	1735	.1823	7628
21	1941	1918	.3161	1531	8106

It must be mentioned that the data are coded so that the lower results show more positive and higher more negative attitudes.



As it can be observed in Table 2, variables 13, 14, 9, 19, 5, 15, 1 and 2 have the greatest part in structuring factor 1. The majority of the variables is connected to the teachers' attitudes toward integration (variables 1, 2, 5, 9 and 13), more specifically to the advantages of regular up-bringing and education for the general progress of pupils with development difficulties. Variables 14 and 15 are connected to the teachers readiness for work with pupils with development difficulties, as well as the possibilities of the adaptation of regular schools for their acceptance, while variable 19 is connected to the teachers' attitude that the majority of pupils with development difficulties can, in regular classes of regular primary school, successfully complete adapted curriculum. This factor can, therefore be named FACTOR OF RECOGNITION OF ADVANTAGES OF INTEGRATION FOR PUPILS WITH DEVELOPMENT DIF-FICULTIES. As there is a positive correlation between aforementioned variables and the factor 1, a conclusion can be drown that the teachers-participants do not recognise the advantages of integrated up-bringing and education for the general progress of these pupils (progress in the education, as well as in socialisation) and do not feel competent for work with them.

Variables 1, 16, 17, 18 and 8 have the greatest role in structuring factor 2. Variable 1 is connected to the recognition of the advantages of integrated upbringing and education over special, while variables 8, 16, 17, 18 show teachers level of familiarity with the characteristics and needs of pupils with development difficulties and the need for securing some subjective, objective and organisational premises for the successful integration. This factor can be named FACTOR OF ATTITUDE TOWARD REGULAR SCHOOLS' EQUIPMENT. As the variables 8, 16 and 17 correlate negatively and variables 1 and 18 positively with this factor, it seems that the teachers recognise the need for additional training and presence of special education professionals in regular school for good quality work with pupils with development difficulties. They feel that the regular schools, such as it is (big classes, one special education professional on several schools, the teachers not prepared for work with pupils with development difficulties during their undergraduate education, and similar) cannot give to pupils with development difficulties all that special education school provides.

The third factor is mostly saturated by variables 3, 4, 2, 11 and 6. The majority is connected to the teachers attitudes toward integration (variables 2, 3, 4, and 11), more specifically to the effects of integration of pupils with development difficulties on regular class work and progress of other pupils. Variable 6 corresponds to the teachers' perception of the other pupils' readiness to accept pupils with development difficulties in a reasonable and friendly manner. This factor can be named FACTOR OF EFFECTS OF INTEGRATION ON OTHER PUPILS. As the all variables correlate negatively with 3. factor, we can conclude that the teachers feel that pupils with development difficulties do not have a negative effect on regular class work, nor have a negative influence on other pupils and the entire educational situation. This result shows that the teachers have accepted pupils with development difficulties, at least to the extent that they do not perceive them as a distraction.

In the structuring of the 4. factor, greatest role is played by variables 7, 6, 12 10 and 5. Variables 7, 10, and 12 relate to the attitudes and knowledge of teachers about pupils with development difficulties (that they are in a lot of ways equal to the pupils without development difficulties, that pupils without development difficulties can form friendship with them), and variable 5 stresses the benefits of the integration for the general progress of pupils with development difficulties, while variable 6 stresses possibility



that the other pupils can be fully prepared for their integration. It seems that this factor could be named FACTOR OF FAMILIARITY WITH CHARACTERISTICS AND NEEDS OF PUPILS WITH DEVELOPMENT DIFFICULTIES. As the variables correlate positively with the factor, it can be concluded that the teachers are not familiar with the characteristics and specific needs of pupils with development difficulties.

And, finally, factor 5. is mostly saturated with only 2 variables - 20 and 21 and slightly less with variable 15. Variables 20 and 21, by their semantic content directly relate to the teachers attitudes toward partial integration, while variable 15 relates to the self-estimate of competence of teachers for work with pupils with development difficulties. Thus we can name this factor FACTOR OF ATTITUDE TOWARD PARTIAL INTEGRATION. As the variables correlated to the factor negatively, it can be seen that the teachers have a positive attitude toward these means of integration, and that they are prepared to work with pupils with development difficulties in upbringing subjects. This also points to the fact that teachers do not feel competent for the undertaking of the complete integration of these pupils.

4.2. Discriminant analysis of teachers' attitudes in relation to some general data

Discriminant analysis of ATI in relation to the sex, age, education level, work experience in regular school and teacher's position, with the objective of stating the differences in attitudes toward pupils with development difficulties and their integration in regular primary schools.

4.2.1. Discriminant analysis for the variable Sex

Results of the discriminant analysis for the variable Sex are as follows:

Results of the analysis of differences between participant groups are obtained of the sample of 194 teachers, 23 of which are male and 171 female.

The variance analysis shows statistically significant difference between to groups of participants, proven with F-test with 1 degree of freedom and shown in Table 3.

Table 3
Variance analysis of the discriminant function on the variable Sex

_	sum of squares	variance estimate	discriminant function	F-test	level of significance
between groups	121.675	121.675	l		
				28.515	.000013
inside groups	819.273	4.267	192		

Centroids for the two groups of participants are found. These show that the participants of female sex have lower results (more positive attitudes) on the discriminant function than the male participants. Analysis of variance for each variable with the discriminant function, and discriminant and correlation coefficients have been found, but these results are not listed here, due to the lack of space.

The analysis of correlation of variables to the discriminant function shows that variables 2, 5, 13, 14, 9 and 6 correlate to the greatest extent, and positively, showing that



the female participants recognise the advantages of educational integration for the general progress of pupils with development difficulties and feel that both school and other pupils can be fully prepared for the adequate reception of these pupils.

Although the standard deviations for both groups are greatly different (1.8753 for the group of male participants and 2.2415 for the female), the results have to be taken with caution, as the number of male participants in the sample is comparatively small (N=23).

4.2.2. Discriminant analysis of the variable Age

The results of the discriminant analysis of the variable Age show the following:

Analysis was performed for the 4 groups of participants -

- 1. Participants between 26 and 35 years of age (N=82)
- 2. Participants between 36 and 45 years of age (N=58)
- 3. Participants between 46 and 55 years of age (N=45)
- 4. Participants between 56 and 65 years of age (N=9)

The discriminant analysis brought forward 3 discriminant functions, all statistically significant on the risk level of 0.01, as shown in the Table 4.

Table 4.

Variance analysis of the discriminant function on the variable Age

		sum of squares	variance estimate	discriminant function	F-test	level of significance
	between groups	95.589	31.863	3		
Discriminant function 1					7.349	.000260
	inside groups	823.791	4.336	190		
	between groups	17.004	5.668	3		
Discriminant function 2				_	4.866	.003150
	inside groups	221.293	1.165	190		
	between groups	37.854	12.618	3		
Discriminant function 3					6.628	.000502
	inside groups	361.692	1.904	190		

Based on the results of the centroids analysis and correlation of variables with discriminant function 1 (variable 14, 19, 6, 15, 20 and 3, positive correlation), it can be concluded that the teachers aged between 36 and 55 are not sufficiently familiar with characteristics and needs of pupils with development difficulties, while older and younger teachers have more information.



The results for the Discriminant function 2 (variables 4, 3 and 8, positive correlation and 13, 10 and 7, negative correlation) we can draw conclusion that older teachers find pupils with development difficulties a distraction from the regular work in class, but accept them, while younger teachers have a more negative attitude toward them, but feel no ill-effects in the class-work.

Analysis of the results for the Discriminant function 3 (variables 8, 21 and 20 with positive correlation) shows that youngest and eldest teachers feel that the full integration is better for the pupils with development difficulties than partial integration.

Regarding the comparatively small number of participants aged over 56 years (N=9), the results for this group should be taken with caution. Still, it is worrying that teachers aged 36-55, who form a greatest part in the whole sample (N=103), regardless their experience, do not have sufficient knowledge about pupils with development difficulties and feel incompetent for work with them. Besides, their attitudes toward these pupils are not positive and they do not recognise the advantages of full integration.

4.2.3. Discriminant analysis for the variable Education level

The analysis of the results of the discriminant analysis for the variable Education level was performed for the two groups of participants

- 1. Participants with higher school degree (N=123)
- 2. Participants with university degree (N=71)

The results are shown in Table 5, and show no statistically significant differences.

Table 5

Variance analysis of the discriminant function of the variable Education level

		sum of squares	variance estimate	discriminant function	F-test	level of significance
	between groups	3.177	3.177	1		
Discriminant function 1					.666	.420835
	inside groups	915.814	4.770	191		

A conclusion can be drown that there are no differences in the attitudes of teachers toward pupils with development difficulties and their integration in regular education regarding the variable Education level.

4.2.4. Discriminant analysis for the variable Work experience

Discriminant analysis for the variable Work experience in regular primary school was performed on the 6 participants' groups

- 1. up to 5 years (N=46)
- 2. between 5 and 10 years (N=39)
- 3. between 10 and 15 years (N=30)
- 4. between 15 and 20 years (N=20)



- 5. between 20 and 25 years (N=30)
- 6. 25 years or more (N=29)

Discriminant analysis has brought up 5 discriminant functions, first 4 statistically significant on the risk level of 0.01, and the last on the risk level of 0.05, as shown in the Table 6.

Table 6
Variance analysis of the discriminant function for the variable Work experience

		sum of squares	variance estimate	discriminant function	F-test	level of significance
	between groups	83.449	16.690	5		
Discriminant function 1					3.737	.003350
	inside groups	839.725	4.467	188		
	between groups	39.129	7.826	5		
Discriminant function 2					6.387	.000072
	inside groups	230.346	1.225	188		
	between groups	25.910	5.182	5		
Discriminant function 3					4.706	.000694
	inside groups	207.13	1.101	188		
	between groups	13.084	2.617	5		
Discriminant function 4					4.555	.000875
	inside groups	108.013	.575	188		
	between groups	18.022	3.600	5		
Discriminant function 5					2.676	.022862
	inside groups	252.959	1.346	188		

Based on the analysis of group centroids and correlation of ATI variables with 1. discriminative function, mostly saturated by the variables 19, 6, 5, 15 20 and 2, positively, a conclusion can be drown that teachers with work experience in regular primary schools longer then 15 years show more negative attitudes toward pupils with development difficulties and their integration and feel more incompetent for work with them, than the teachers with work experience not exceeding 15 years.

Results on the Discriminative function 2 (variables 4 and 3, positively and variable 21 negatively) show that the teachers with work experience longer then 15 years also feel



that the pupils with development difficulties are a problem in the classroom and that it is better for them to attend special, rather then regular education.

Correlation of the variables ATI and 3rd discriminative function (variables 16 and 3 with positive and variables 1 and 7 with negative sign) show that teacher with work experience under 5 and between 15 and 20 years do not have sufficient knowledge about characteristics of pupils with development difficulties and feel that regular school cannot provide them with everything a special school can, but are aware of needs for more special education training.

The analysis of results for the 4th discriminative function (variables 10, 8, 7 and 9 with positive and variables 13 and 20 with negative sign) shows that teachers with work experience of over 25 years think that pupils with development difficulties cannot learn in regular school as much as they can in special school, but that integration is good for their socialisation.

Finally, the results of correlation analysis for the ATI variables and 5th discriminative function (variables 21 and 8 with positive and 9, 13 and 10 with negative sign, on the risk level of 0.05) seem to show that the teachers with work experience in regular school exceeding 5 years feel that it would be better for the pupils with development difficulties to attend special classes in regular school, as the full integration does not do any good for them, nor for the other pupils.

4.2.5. Discriminant analysis for the variable Position

The discriminant analysis for the variable Position (Table 7) are obtained for the two groups of teachers - class teachers (N=72) and subject teachers (N=122) and show that there is a statistically significant difference between their attitudes toward the integration of pupils with development difficulties.

Table 7
Variance analysis for the discriminative function on the variable Position

	sum of squares	variance estimate	discriminant function	F-test	level of significance
between groups	51.634	51.634	1		
_	01.004	31.034	1	11.512	.001208
inside groups	861.130	4.485	192		

The analysis of the groups' centroids and of variables correlation for ATI and discriminative function (variables 5, 13, 14, 9, 1, 3 and 7 with the positive sign) a conclusion can be drown that the subject teachers have significantly more negative attitudes than the class teachers. Class teachers accept these pupils and stress the importance of integration for their development.

5. Conclusion and discussion

Educational integration in Croatia was, as mentioned above, legalised in 1980, which was primarily caused by the world-wide spreading new attitude towards pupils with development difficulties and opinion that all children have equal rights on upbringing and education. Besides, numerous research works in countries which started with edu-



cational integration earlier were stressing the advantages of this up-bringing and education has for children with development difficulties, on the areas of socialisation, learning and development of their potentials. Quite extensive research was carried out in Croatia as well, prior to the legalisation of integration, all stressing the necessity of fulfilment of objective, subjective and organisational premises of integration for its successful realisation. It has been decided that, regardless of the current educational system condition, the integration should be started and the problems solved "as we go along". Unfortunately, very little has been done so far. The teachers carry greatest weight and responsibility for realisation of integration and the professional help is not, contrary to the legislative, available, except in the some Croatian regions.

The factor analysis of the questionnaire Attitudes toward integration was undertaken for the sample of 194 teachers in regular primary school in Zagreb to determine the latent structure of the teachers' attitudes toward the children with development difficulties and their integration in regular primary schools. A total of five factors have been found:

- 1. Factor of recognition of advantages of integration for pupils with development difficulties
- 2. Factor of attitude toward regular schools' equipment
- 3. Factor of effects of integration on other pupils.
- 4. Factor of familiarity with characteristics and needs of pupils with development difficulties
- 5. Factor of attitude toward partial integration.

Unfortunately, the position of the teachers on these factors i.e. the attitudes towards children with development difficulties and their integration in regular primary schools are not positive. These results show that teachers, even after 15 years of integration experience, are not aware of the advantages of integrated upbringing and education for the children with development difficulties and their general development. It seems that the problems spring from the teachers over-business, too big classes, lack of didactic material and the firmly fixed curriculum. The basis of the problem probably lays in under-graduate education of teachers inadequate for work with these pupils, which is shown by the teachers position on the factor of familiarity with characteristics and needs of pupils with development difficulties. Besides, through position on Factor of attitude toward regular school's equipment the teachers themselves stress the need of additional special education training, as well as the need for special education professionals' availability in schools. Their positive attitude toward partial integration also shows that they do not feel secure in there professional competence for work with these pupils. But, the attitudes of teachers on Factor of effects of integration on other pupils bring some optimism, as the teachers are aware that the pupils with development difficulties do not have a negative influence on the behaviour and progress of other pupils.

Understanding of needs of pupils with development difficulties would help teachers understand objectives in work with them and accept educational integration as the best solution. To realise that, additional education of teachers is necessary, to widen their knowledge and develop their acceptance of pupils with development difficulties and their integration in regular schools.



Discriminant analysis of the questionnaire Attitudes toward integration was performed to determine the differences in attitudes of teachers toward children with development difficulties.

Generally, the most positive attitudes toward children with development difficulties and their integration in regular primary schools are expressed by the female participants, aged under 36 and by the teachers with less then five years work experience and the class teachers. On the other side, the most negative attitudes are expressed by male teachers, aged over 36 and with work experience in regular school of over 15 years and the subject teachers. The education level of teachers has not shown to be a variable discriminating the aforementioned groups.

The teacher's sex obviously influences attitudes toward children with development difficulties, although smallness of the male teachers' sample (N=23) reduces the reliability of this result.

Younger teacher express more negative attitudes toward pupils with development difficulties, but do not see them as a problem in the classroom and feel that the full integration is more beneficent for their general development than the partial integration. The teachers aged 36+ show that they are not sufficiently informed about characteristics and needs of pupils with development difficulties, but accept them better, although they pose a problem. The attitudes of both younger and older teachers toward pupils with development difficulties and their integration are rather ambivalent. It seems that the younger teachers know more about characteristics and needs of these pupils, while older have more positive attitude. It may be concluded that additional education of teachers is needed by all teachers' age-groups.

As the educational level has not shown to be a variable determining the participants groups in regard of their attitudes toward pupils with delayed cognitive development, it seems that neither the two-year (higher school) nor four-year (university) inform and prepare the teachers sufficiently for work with aforementioned pupils.

It is very disturbing that the teachers attitudes toward integration get more negative with work experience. It is possible that tiredness of their work is partly responsible for these results, together with frustration with the high requests of their work. Has motivation of older teachers decreased so much because they realised that, in spite of the great amount of work they put in, there is still very little result? Or they did not know (insufficient and/or inadequate training) that these small results are big for children with development difficulties and their parents.

Finally, the subject teachers have significantly more negative results toward pupils with development difficulties and their integration in regular primary schools than the class teachers. The subject teachers do not accept these pupils and are not aware of the advantages of integration. These attitudes were expected as the class teachers meet these pupils daily and know them better, so their attitudes are more positive. Besides, subject teachers meet these children in older primary school age (10-14) when the differences between them and the average pupils are more visible and the requests on all pupils higher than in the younger age.

Based on the results of this work, it can be concludes that it is necessary that more work should be put in the improvement of the process of integration of children with development difficulties in the Republic of Croatia, as much as the economic situation permits.



More self-confidence, awareness of one's professional competence and more satisfaction in one's work through more objective results evaluation and awareness of their merits and availability of professional and psychological support, could probable be provided by the programme Education of teacher for the development of acceptance of pupils with development difficulties.

6. Literature

- 1. Atkin, J., Bastiani, J., 1985.: Preparing Teachers for Work with Parents. A Survey of Initial Training, Nottingham: Nottingham University School of Education
- 2. Cartledge, G., Frew, T., Zaharias, J., 1985.: Social skill needs of mainstreamed students: Peer and teacher perceptions, Learning Disability Quarterly, 8, 132-140
- 3. Fulgosi-Masnjak, R., 1989.: The effects of different models of integration of children with delayed cognitive development pupils' and parents' attitudes, Master degree thesis, Faculty of Philosophy, Zagreb
- 4. Garrett, M. K., Crump, W. D., 1980.: Peer acceptance, teacher preference, and self-appraisal of social status of learning disabled students, Learning Disability Quarterly, 3, 42-48
- 5. Harasimiw, S. J., Horne, M. D., 1976.: teacher attitudes toward handicapped children and regular class integration, Journal of Special Education, 4, 10, 393-400
- 6. Levandovski, D., 1982.: The attitudes of teachers toward integration of mentally retarded children in regular up-bringing and education system, Defectology, 18, 1-2, 45-52
- 7. Levin, H., 1992.; Accelerated Schools for At-risk Students, New Bruinswick, N. J.: Center for Policy Research in Education, Rutgers University
- 8. Lewis, R. B., Doorlag, D. H., 1987.: Teaching Special Students in the Mainstream, Merrill Publishing Company, Columbus, Ohio
- 9. Lyon, G. R., Vaassen, M., Toomey, F., 1989.: Teachers Perceptions of Their Undergraduate and Graduate Preparation, Teacher Education and Special Education, 12, 4, 164-169
- 10.Mavrin-Cavor, Lj., Levandovski, D., 1991.: The research of premises and effects of integration of pupils with mental retardation in regular conditions of up-bringing and education in Croatia, Applied psychology, 12, 1-2, 47-54
- 11.McEvoy, M. A., Nordquist, V. M., Cunningham, J. L., 1984.: Regular and Special education Teachers judgements about Mentally retarded children in a integrated setting, American Journal of Mental Deficiency, 2, 89
- 12.Mustać, V., Vicić, M., 1996.: Work with pupils with development difficulties in primary school, Educator's handbook, Školska knjiga, Zagreb
- 13.Muth, J., 1977.: Moglihckeiten und Grenzen schulischer Integration behinderter Kinder, Zeitschrift fur Meilpadagogik, 24, 262-272
- 14. Sekulić-Majurec, A., 1983.: Integration of pupils with development difficulties in regular up-bringing and primary education and the premises of realisation, Doctor's degree thesis, Faculty of Philosophy, Zagreb



- 15. Shotel, J. R., Iano, R. P., McGettingan, J. F., 1972.: teacher attitudes associated with the integration of handicapped children, Exceptional Children, 9, 38, 677-684
- 16.Stančić, V., Mejovšek, M., 1982.: Attitudes of regular primary school teachers toward up-bringing and educational integration of children with development difficulties, Faculty of Defectology, Zagreb
- 17. Stierer, B., 1985.: School reading Volunteers: results of a postal survey of primary school headteachers in England, Journal of Research in Reading, 8, 1, 21-31
- 18. Strain, P. S., Kerrs, M. M., 1981.: Mainstreaming of Children in Schools: Research and Programmatic Issues, London, Academic Press
- 19.Štević-Vuković, V., 1986.: Objective and subjective premises of integration of pupils with development difficulties in regular schools, Master's degree thesis, Faculty of Defectology, Zagreb
- 20. Thomas, G., 1992.: Effective Classroom Teamwork: Support or Intrusion?, Biddles Ltd, Guildford and Kings Lynn
- 21. Thousand, J. S., Villa, R. A., Nevin, A. I., 1994.: Creativity and Collaborative Learning: A practical Guide to Empowering Students and Teachers, Baltimore, Paul H. Brookes
- 22. Villa, R. A. Thousand, J. S., 1992.: Restructuring Public School Systems: Strategies for Organizational Change and Progress, In Restructuring for Caring and Effective Education: An Administrative Guide to Creating Heterogenous School, (pp. 109-140), edited by R. A. Villa, J. S. Thousand, W. Stainback and S. Stainback, Baltimore, Paul H. Brookes
- 23. Law about up-bringing and primary education, Narodne novine, br. 4, 1980



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